

## REMARKS/ARGUMENTS

The Examiner is thanked for the courteous telephone interview granted Applicants' representative on July 6, 2007. The amendment of claim 9 to incorporate subject matter of various dependent claims was discussed during the interview, and the Examiner indicated that the amendments appeared to place the application in condition for allowance subject to review by the Examiner's supervisor.

Claim 9 is pending in the present application. Claims 1-8 and 10-29 were canceled to expedite prosecution, and no claims were added. Reconsideration of the rejection is respectfully requested in view of the above amendments and the following comments.

### **I. 35 U.S.C. § 101**

The Examiner has rejected claims 1-21 under 35 U.S.C. § 101 as being directed towards non-statutory subject matter. This rejection is respectfully traversed.

The Examiner states:

The language of claims 1-21 raise a question as to whether the claims are abstract ideas and would not result in practical application producing a useful, concrete, and tangible result to form the basic of statutory subject matter under 35 U.S.C. 101. For example, runtime code, a concrete bean, an injector, a bean adapter binding, a function set, an extractor, a data cache entry are abstract ideas that do not produce any tangible result<e.g. just a though or just a computation within a processor which does not provide an output thereby creating a tangible result which enables the usefulness to be realized>.

Office Action dated April 6, 2007, page 2.

Claims 1-8 and 10-21 have been canceled. Therefore the rejection with respect to those claims is now moot. With respect to claim 9, Applicants respectfully submit that the claim as presented herein fully satisfies the requirements of 35 U.S.C. § 101 in all respects. In particular, claim 9 is directed to a container managed persistence entity bean system in a data processing system, and recites specific structure of the system including, for example, a data cache and a backend that comprises a data storage system. Claim 9, accordingly, does not recite only abstract ideas or computations. Furthermore, the claim positively recites that the data cache receives data from an extractor and holds the data received from the extractor, wherein the data is data for a given instance of a container managed persistence bean. Thus, claim 9 also recites a tangible result which enables the usefulness of the system to be fully realized.

Therefore, claim 9 satisfies the requirements of 35 U.S.C. § 101, the rejection of the claims under 35 U.S.C. § 101 has been overcome.

## II. 35 U.S.C. § 103, Obviousness

The Examiner has rejected claims 1, 2, and 4-5 under 35 U.S.C. § 103(a) as being unpatentable over Yeluripati et al., US. 7,086,065 B1 (hereinafter Yeluripati), in view of Sudarshan et al., US. 2002/0004850 A1 (hereinafter Sudarshan). In addition, the Examiner has rejected claims 3 and 6-29 under 35 U.S.C. § 103(a) as being unpatentable over Yeluripati in view of Sudarshan, and further in view of Chen et al., US. 2003/0182307 A1 (hereinafter Chen). These rejections are respectfully traversed.

Initially, claims 1, 2, 4, and 5 have been canceled. Accordingly, the rejection of those claims as being unpatentable over Yeluripati in view of Sudarshan is now moot. With respect to claim 9, the Examiner states that it is rejected for the same reasons as claims 1, 3 and 6-8. In rejecting claims 1, 3 and 6-8, the Examiner states:

**As to claim 1**, Yeluripati teaches the invention substantially as claimed including: a call (calls, col 15, ln 10-11), a client (client, col 8, ln 15-25), a container managed persistence bean (container, col 15-20), receiving a call from a client to manipulate an instance of a container managed persistence bean (col 8, ln 15-20, ln 22-28), a set of generated code (function bean, col 6, ln 27-30), wherein the call is received using a set of generated code (col 6, ln 27-30), bean specific functions including bean specific methods for a bean type (type of function bean, col 6, ln 27-30/ col 8, ln 61-65), wherein the set of generated code is designed to perform bean specific functions including bean specific methods for a bean type (col 6, ln 27-30/ col 8, ln 61-65), and interfacing with a backend (col 8, ln 56-58); and processing the call through a set between the set of generated code and the runtime code (col 8, ln 50-60), a set of calls (the APIs, col 13, ln 51-55, wherein the runtime code performs the functions, which are performed in a manner that is nonspecific to a bean type (col 8, ln 55-60). Yeluripati does not explicitly teach managing input parameters for the bean specific methods, processing a result of bean finders; and returning a result to the client. However, Sudarshan teaches managing input parameters for the bean specific methods, processing a result of bean finders; and returning a result to the client (method call includes the name of the method to be invoked and the parameters and is transferred to the EJB enabled server, para [0066], ln 15-23/ asynchronous lookup for the EJB methods like getHandle, etc. Some more methods besides the ones mentioned above may also be seen in the interface, e.g., releaseMessaging Service-a utility method which could-be used by the client system for performing certain operations, para [0042], ln 4-9). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Sudarshan to incorporate the features managing input parameters for the bean specific methods, processing a result of bean finders; and returning a result to the client because this providing an achieve container managed asynchronous functionality between the client system and the EJB-enabled server.

**As to claim 3**, Yeluripati teaches a concrete bean (col 8, ln 39-45), a function set (col 8, ln 60-65) and Sudarshan teaches a bean adapter binding (para [0042], ln 4-8).

Yeluripati and Sudarshan do not teach injector, an extractor, and a data cache entry. However, Chen teaches injector, an extractor, a data cache entry (the resultant data is converted into an entity bean 116 and returned from the database in response to this request 114, para [0031], ln 3-7/ the second request is also converted into an entity bean 124 and placed in cache 118, para [0031], ln 7-11). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Sudardhan, Yeluripati to incorporate the features injector, an extractor, a data cache entry because this allowing the client may quickly and easily retrieve the information from caches.

**As to claim 6**, Yeluripati teaches a backend (col 2, ln 52-55).

**As to claim 7**, Chen teaches converting the data into a format used by the instance of a container managed persistence bean ([para 0031], ln 1-10).

**As to claim 8**, Chen teaches input parameters for the bean specific methods includes converting input parameters from a format used by the instance of a container managed persistence bean to a formatted input for use in accessing a backend (right col 6, ln 43-48).

Office Action dated April 6, 2007, pages 3-5.

By the present amendment, claim 9 has been amended to utilize consistent terminology and to generally recite the invention more clearly and with greater specificity. Neither Yeluripati nor Sudarshan nor Chen, nor their combination teaches or suggests many of the features now recited in claim 9, and claim 9 is not obvious in view of the references. For example, as recognized by the Examiner, the primary reference to Yeluripati fails to disclose features of the claim including features relating to managing input parameters for bean specific methods and processing a result of bean finders. The Examiner also acknowledges that neither Yeluripati nor Sudarshan discloses or suggests claimed features such as the injector, the extractor and the data cache entry. Applicants agree that the references do not disclose these features. In addition, Applicants submit that the references also fail to disclose various other features now recited in the claim, for example "wherein the concrete bean calls inherited bean specific functions prior to calling the runtime code, the inherited bean specific functions being written by a specific bean type provider, and wherein the concrete bean locates a specific container managed persistence bean instance by creating a container managed persistence bean associated with a bean type, but not associated with a specific bean instance", and "a function set, wherein the function set provides access to the backend in response to being called by the runtime code, wherein the function set uses the formatted input created by the injector to access the backend by executing bean-specific and backend specific data access logic."

In general, Applicants respectfully submit that claim 9 as presented herein recites an invention that is not obvious in view of the teachings of the cited art and that patentably distinguishes over the cited art and is allowable in its present form; and it is respectfully requested that the Examiner so find.

Therefore, the rejection of the claims under 35 U.S.C. § 103(a) has been overcome.

### **III. Conclusion**

It is respectfully urged that this application is now in condition for allowance, and it is respectfully requested that the Examiner so find and issue a Notice of Allowance in due course.

Applicants have amended claim 9 and canceled claims 1-8 and 10-29 from further consideration in this application. Applicants are not conceding in this application that those claims are not patentable over the art cited by the Examiner, as the present claim amendments and cancellations are only for facilitating expeditious prosecution of subject matter that the Examiner indicated was believed to be allowable. Applicants respectfully reserve the right to pursue these and other claims in one or more continuations and/or divisional patent applications.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,

/Gerald H. Glanzman/

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